

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
NORTHERN DIVISION

NO. 2:17-CV-4-FL

SAVE OUR SOUND OBX, INC.;
THOMAS ASCHMONEIT; RICHARD
AYELLA; DAVID HADLEY; MARK
HAINES; JER MEHTA; and GLENN
STEVENS,

Plaintiffs,

v.

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION; JAMES H.
TROGDON, III in his official capacity as
Secretary of the North Carolina
Department of Transportation; FEDERAL
HIGHWAY ADMINISTRATION; and
JOHN F. SULLIVAN, III, in his official
capacity as Division Administrator for the
Federal Highway Administration;

Defendants,

and

DEFENDERS OF WILDLIFE; and
NATIONAL WILDLIFE REFUGE
ASSOCIATION,

Intervenor-Defendants.

ORDER

This matter is before the court on the parties' cross-motions for summary judgment. (DE 95, 107, 108, 115). The motions have been fully briefed, and the issues raised are ripe for ruling. For reasons noted, plaintiffs' motion is denied and defendants' and intervenor-defendants' motions are granted.

STATEMENT OF THE CASE

This action concerns the highway construction project designated in the administrative record as State Transportation Improvement Program Project No. B-2500 (“B-2500 project”).¹ The overall purpose the B-2500 project is to provide a reliable method of road transportation in North Carolina’s outer banks through 2060 by replacing and improving a stretch of North Carolina Highway 12 (“NC-12”) from the southern end of Bodie Island to the village of Rodanthe. The B-2500 project is segmented into phases. Phase I, wherein construction now is ongoing, involves construction of a new bridge to span Oregon Inlet – a short waterway that runs between Bodie and Hatteras Islands and connects the Pamlico Sound in the West with the Atlantic Ocean in the East. Phase I will serve to replace the aging Herbert C. Bonner Bridge (“Bonner Bridge”), which served as the only mode of crossing Oregon Inlet since that bridge opened in 1962.

In an earlier action brought prior to initiation of Phase I, intervenor-defendants Defenders of Wildlife and the National Wildlife Refuge Association (collectively, “conservation groups”), sued Eugene A. Conti, Jr., then-Secretary of the North Carolina Department of Transportation (“NCDOT”), and defendant NCDOT challenging a Record of Decision issued in 2010, (“2010 Phase I ROD”), which authorized construction of Phase I. Defenders of Wildlife v. North Carolina Department of Transportation; 762 F.3d 374 (4th Cir. 2014). That action was litigated at the trial level before the undersigned. 971 F. Supp. 2d 510 (E.D.N.C. 2013). This court ruled in favor of the defendants on cross-motions for summary judgment. On appeal, the Fourth Circuit affirmed in part,

¹ In memorandum opinion setting forth reasons for earlier denial of [defendants’] motion to dismiss, the court previously referred to the B-2500 project as the “Bonner Bridge replacement project.” (DE 66). Replacement of Bonner Bridge was one of the main goals for the B-2500 project and, in numerous instances, the parties and the administrative record refer to the entirety of the B-2500 project as the Bonner Bridge replacement project. (See e.g., RD 1111). Nonetheless, where the issues presented in this matter relate, primarily, to construction that would follow replacement of Bonner Bridge, the court finds it more appropriate to refer to the “B-2500 project” henceforth.

reversed in part, and remanded for further proceedings. That action came to a close when, on April 11, 2015, the parties filed joint stipulation of dismissal, which action consummated settlement agreement executed by the parties (“2015 settlement agreement”).

Phase II, which has been further subdivided in Phases IIa and IIb, involves building improvements to NC-12 in two areas of the outer banks that defendant NCDOT has designated as “hot spots” where natural erosion and overwash regularly damage NC-12 requiring maintenance and road closures. Phase IIa embraces improvements in the area between the southern end of the Pea Island Wildlife Refuge’s (“Refuge”) South Pond and the northern end of the 2.1-mile section of NC-12 in the southern half of the Refuge that is not expected to be threatened by shoreline erosion prior to 2060. This area includes a breach caused by Hurricane Irene in August 2011 that temporarily opened an inlet between Pamlico Sound and the Atlantic Ocean, which inlet now is closed due to natural processes.

Phase IIb, which is the subject of this litigation, involves improvements to the area between the Emergency Ferry Dock in Rodanthe to approximately 1.8 miles north of the Refuge border. This area includes a breach in Rodanthe, also caused by Hurricane Irene, as well as the Rodanthe “S Curves Hot Spot” and two other areas identified in the 2008 Final Environmental Impact Statement (“2008 FEIS”) as geologically susceptible to breaches.

On December 15, 2016, defendants NCDOT and James H. Trogdon, III (“Trogdon”) (collectively, “state defendants”) and defendant Federal Highway Administration (“FHWA”) and John F. Sullivan, III (“Sullivan”) (collectively, “federal defendants”), together with other interested agencies (collectively “the Agencies”), issued a Record of Decision (“2016 Phase IIb ROD”), which

approved plans for Phase IIb. The 2016 Phase IIb ROD approves construction of a bridge that removes a section of NC-12 from the Refuge into the Pamlico Sound (“jug-handle bridge”).

Plaintiffs initiated this action February 2, 2017, challenging the 2016 Phase IIb ROD under the National Environmental Policy Act (“NEPA”), Section 4(f) of the Department of Transportation Act (“Section 4(f)”), the North Carolina Environmental Policy Act, and the judicial review provisions of the Administrative Procedure Act (“APA”).

The conservation groups, formerly plaintiffs in the settled Phase I litigation, moved to intervene on March 3, 2017. This court granted that unopposed motion. Plaintiffs then amended their complaint as a matter of right on March 7, 2017, abandoning their claims under North Carolina law. At the same time, plaintiffs moved for preliminary injunction, which motion this court initially stayed, and recently denied without prejudice rather than maintain indefinite stay, as the parties agreed that no ground-disturbing activities were scheduled to commence until March 2018, and further extended in the current schedule to June 6, 2018.

Federal defendants lodged the administrative record July 7, 2017, which consists of the prior administrative record underlying Phase I and additional documents generated since that time. Plaintiffs moved to compel completion of the administrative record, or, in the alternative, to compel production of agreement negotiation materials pertinent to the 2015 settlement agreement so that plaintiffs might assert them as extra-record evidence. This court denied that motion October 20, 2017. Also on October 20, 2017, plaintiffs moved for leave to file a second amended complaint, seeking to add claims arising under Section 106 of the National Historic Preservation Act (“Section 106”). On October 26, 2017, the court granted plaintiffs’ request to withdraw the October 20, 2017, motion to amend the complaint and to assert, instead, a revised motion to amend. On December 5,

2017, the court granted in part the revised motion to amend allowing amendments related to a possible haul route located in the Rodanthe Historic District, but denied the motion as it pertained to claims related to a shipwreck off Pappy Lane in the Phase IIb project area. Plaintiffs moved for summary judgment on January 10, 2018. Defendants and intervenor-defendants cross-moved for summary judgment on February 21, 2018.

Plaintiff Save Our Sound OBX, Inc. (“Save Our Sound”) is a non-profit corporation existing under the laws of North Carolina with its principal place of business in North Carolina. The individual plaintiffs are members of Save Our Sound. Each individual plaintiff claims non-economic injury arising from, among other things, regular use of the public lands, wetlands, and waters in and around the Refuge and the Rodanthe Historic District.

Defendant FHWA is a federal administrative agency within the United States Department of Transportation. Defendant Sullivan is administrator for the FHWA’s North Carolina Division Office. FHWA administers various statutes pertaining to highway transportation, including statutes governing highway construction projects eligible for federal funding, projects involving construction over protected wildlife preserves, and environmental review of such projects pursuant to NEPA, Section 4(f), and Section 106.

Defendant NCDOT is a North Carolina administrative agency with authority over highway construction within North Carolina. Defendant Trogdon is NCDOT’s Secretary. NCDOT is the state transportation department with responsibility to submit to the Secretary of Transportation any project requiring the Secretary’s approval. For purposes of NEPA, FHWA and NCDOT are joint lead agencies, which designation, under pertinent federal regulations, charges FHWA and NCDOT

with responsibility to supervise preparation of any environmental impact statement required under NEPA.

Plaintiffs contend that the Agencies approved construction of the jug-handle bridge without appropriate consideration of environmental consequences under NEPA, feasible alternatives under Section 4(f), and effects on historically significant property under Section 106. Plaintiffs seek judicial review pursuant to the APA.

Plaintiffs moved for summary judgment January 10, 2018. In support, plaintiffs rely on the administrative record, declarations from each individual plaintiff, and an e-mail transmission written by counsel for state defendants John Batherson. Each defendant cross-moved for summary judgment February 21, 2018. In support of their motions, defendants rely also on the administrative record.

STATEMENT OF THE UNDISPUTED FACTS

The undisputed facts may be summarized as follows. NC-12 runs north-to-south along the outer banks of North Carolina and connects Bodie Island in the North with Rodanthe in the South, and continues along the Outer Banks. AR 58326.² The southern end of Bonner Bridge lies in the Refuge, which spans from the northern tip of Hatteras Island to Rodanthe. *Id.* Beginning in the early 1990s, FHWA and NCDOT began to study replacement projects for the aging Bonner Bridge,

² Where the B-2500 project is segmented into phases, the administrative record for Phase IIb adds to the administrative record created for phase I. Documents generated for purposes of environmental review of phase I include bates stamps beginning with “AR,” and the parties cite those documents with reference to “AR” bates stamps. Documents included specifically for purposes of environmental review of Phase IIb bear bates stamps beginning with “RD,” and the parties cite those documents with reference to “RD” bates stamps. For ease of reference, the court follows the parties’ citation convention in this regard. Documents bearing “AR” bates stamps are housed in CM/ECF at 2:12-mc-00001-FL. Documents bearing “RD” bates stamps are housed at 2:17-mc-00001-FL.

as well as improvements to sections of NC-12, which is the only North-South roadway along portions of the outer banks. RD 2261.

FHWA and NCDOT formed a “NEPA/Section 404 Merger Team,” (“Merger Team”) consisting of representatives from FHWA, NCDOT, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers (“USACE”), the U.S. Environmental Protection Agency, the National Marine Fisheries Service, the National Park Service, the North Carolina Department of Cultural Resources, the North Carolina Wildlife Resources Commission, the North Carolina Department of Environmental and Natural Resources (“NCDENR”) – Division of Water Quality, the NCDENR – Division of Coastal Management, and the NCDENR – Division of Marine Fisheries. RD 28988. Pursuant to a Memorandum of Understanding executed by the members of the Merger Team, once a member indicates “concurrence” at a given point in the overall project, that member of the Merger Team must abide by decision subject to concurrence absent circumstances warranting reevaluation. RD 16644–50.

In September 2008, the 2008 FEIS issued, which document included a Final Section 4(f) Evaluation, AR 58795, addressed seven alternatives plans for improvements to NC-12, and identified the “Parallel Bridge Corridor with Phased Approach/Rodanthe Bridge” as the preferred alternative. AR 58280–81. The 2008 FEIS assessed a proposal termed the Road North/Bridge South alternative that included a bridge in Pamlico Sound near Rodanthe in the current Phase IIb area, although the alignment of that bridge was different than the jug-handle bridge now under review. AR 58277. Also among the alternatives selected for detailed study were proposals involving beach nourishment and beach nourishment combined with a bridge within the existing

NC-12 easement. The 2008 FEIS's analysis pertaining to beach nourishment was conducted in light of shoreline erosion projections based on modeling completed in 2004. AR 58277–78.

In October 2009, a Revised Final Section 4(f) evaluation issued, AR 75239, which added an alternative titled the “Parallel Bridge Corridor with NC-12 Transportation Management Plan.” AR 75244. This alternative contemplates a phased approach to the overall B-2500 project with mixing and matching of components borrowed from other alternatives previously identified in the 2008 FEIS. Id. In Phase I, the Bonner Bridge over Oregon Inlet would be replaced as soon as possible. The content of future phases was left to be determined “based on actual conditions existing on Hatteras Island at the point in time that additional action becomes necessary.” Id. Following a May 2010 Environmental Assessment (“2010 Phase I EA”), AR 83394, the 2010 Phase I ROD issued in December 2010 approving construction of a replacement bridge over Oregon Inlet in conformity with the alternative identified in the Revised Final Section 4(f) Evaluation and the 2010 Phase I EA. AR 91952.

In August 2011, Hurricane Irene damaged NC-12 in the Rodanthe S Curves and within the Refuge approximately six miles south of Oregon Inlet, creating the Pea Island Inlet. RD 29249. In February 2013, an Environmental Assessment (“2013 Phase IIa EA”) issued to account for these environmental changes. Id. Incorporating information developed in the 2013 Phase IIa EA, a Record of Decision (“Phase IIa ROD”) issued in October 2013 and approved plans to construct an alternative termed “Bridge within Existing Easement,” which would involve “building a bridge in the existing NC 12 easement approximately 2.1 miles in length to replace the existing surface road and the temporary bridge over the Pea Island inlet.” RD 10753. As of issuance of the Phase IIa EA, improvements in the area around the Pea Island Inlet were designated “Phase IIa,” RD 29247, while

improvements near northern Rodanthe were designated “Phase IIb.” RD 29248. The foregoing alternative for Phase IIa would have provided a long-term bridge over hot spots on Pea Island through 2060; however, it was not constructed for reasons described in more detail below.

In December 2013, the Agencies issued an Environmental Assessment pertinent to the Phase IIb area in northern Rodanthe (“2013 Phase IIb EA”), which updated previous NEPA documentation. RD 17805. The 2013 Phase IIb EA addresses plans to implement long-term improvements to NC-12 along the S Curves and in areas near Rodanthe damaged by Hurricane Irene. RD 17823. The 2013 Phase IIb EA identified four alternatives consisting of (1) the “Bridge on New Location [(also, “jug-handle bridge”)]; (2) an “easement bridge” within the existing NC-12 easement (“easement bridge”); (3) beach nourishment; and (4) beach nourishment combined with a bridge within the existing easement. RD 17829. The latter two options were eliminated from detailed study at a Merger Team meeting held November 14, 2012. RD 17834. Thus, only the former options were assessed in the 2013 Phase IIb EA in detail, and the easement bridge was identified as the preferred alternative. RD 17849.

Neither the jug-handle bridge nor the easement bridge studied in the 2013 Phase IIb EA were entirely new alternatives. The jug-handle bridge assessed in the 2013 Phase IIb EA builds upon and incorporates changes to “the Bridge South component of the Road North/Bridge South Alternative that was assessed in the 2010 [Phase I] EA.” RD 11573. In turn, the Road North/Bridge South alternative discussed in the 2010 Phase I EA constitutes a modified and more detailed version of the Road North/Bridge South alternative studied in the 2008 FEIS. AR 83408–08 (“Several modifications were made to the detailed study alternatives . . . since the release of the [2008] FEIS . . . These changes are: . . . [m]odifications to the conceptual designs . . . for the Road North/Bridge

South [and other] alternatives.”). Similarly, the easement bridge assessed in the 2013 Phase IIb EA incorporates “refinements from the Phased Approach/Rodanthe Bridge Alternative assessed in the 2008 FEIS and 2010 EA.” RD 11574. In this manner, both alternatives assessed in the 2013 Phase IIb EA incorporate analysis from earlier NEPA documentation and further develop the record pertinent to those alternatives.

Following release of the 2013 Phase IIb EA, the Merger Team held a series of public meetings to “obtain public input on long-term improvements to NC 12” RD 11789. The Merger Team accepted written comments. RD 11790. Following the comment period, NCDOT developed two new possible alignments for the Bridge on New Location Alternative designed to avoid areas of dense submerged aquatic vegetation in the southern half of the project area. RD 16946–47. Each alignment is described in the record as “nearly identical” to the alignment studied in the 2013 Phase IIb EA. RD 16947. These two new alignments are depicted below alongside the alignment identified in the 2013 Phase IIb EA and the original “2010 Bridge South” alignment identified in the 2008 FEIS:



RD 23455.

At a February 2014 meeting, National Marine Fisheries Service agreed that the proposed new alignment was preferable to the 2013 alignment, but requested more information regarding submerged aquatic vegetation. RD 16947. The proposed new alignments were presented at a March

6, 2014, Merger Team meeting. RD 14273. During that meeting, the Merger Team concurred that the jug-handle bridge and easement bridge would be evaluated further as possible alternatives for Phase IIb. RD 14278.

Also during 2014, defendants FHWA and NCDOT litigated the conservation groups' challenge to the 2010 Phase I ROD and related documents. See Defenders of Wildlife v. N.C. Dep't. of Transp., 2:11-cv-35-FL (E.D.N.C.). The conservation groups objected to two key components of the B-2500 project. First, the conservation groups objected to segmentation of the B-2500 project into phases, contending that defendants should have undertaken to plan and analyze environmental effects of the entire B-2500 project prior to any construction activity. See id., Pls.' Compl. ¶¶ 51, 67–77. Second, the conservation groups objected to defendants' reliance on a "joint planning exception" to Section 4(f), which defendants erroneously believed absolved them of their duty to analyze environmental effects of the B-2500 project on the Pea Island Refuge "as a refuge." Id. ¶¶ 108–09. Read as a whole, the conservation groups' complaint in that action discloses that the conservation groups primarily were concerned that the Agencies had failed to plan the B-2500 project, as a whole, in a manner that would minimize environmental effects on the Refuge. See id. ¶ 51 ("In other words, the Defendants opted to ignore the problem of what to do with NC-12 and segmented the Project in order to move forward with a replacement for Bonner Bridge."). That is, the central issue of the conservation groups' prior litigation was not the selected alternative to replace Bonner Bridge in Phase I; rather, it was the subsequent transportation management plan, which at that time did not account for environmental effects on the Refuge "as a refuge" that occupied the conservation groups' address. See id.

The Fourth Circuit rejected the conservation groups’ challenge to defendants’ decision to plan the B-2500 project in phases. Defenders of Wildlife, 762 F.3d at 398. However, the Fourth Circuit agreed with the conservation groups that no joint planning exception to the strictures of Section 4(f) was available. Id. at 401–02. In this manner, the conservation groups’ litigation efforts may be characterized as successful in that the conservation groups established that the law required defendants to analyze environmental effects on the Refuge under the strict standards of Section 4(f) rather than under the more limited procedural rules of NEPA, thus requiring defendants to give significantly more weight to any environmental effects on the Refuge than the 2010 Phase I ROD contemplated. See id.

The parties to that action settled April 30, 2015. (DE 91-1). Under the terms of the 2015 settlement agreement, the conservation groups agreed to take dismissal of Defenders of Wildlife, which result allowed defendants to begin construction of a replacement for Bonner Bridge. (DE 96-1 ¶ 1.h). In exchange, defendants made two main concessions regarding later phases of the B-2500 project. First, defendants agreed to rescind the contract for Phase IIa, which, as noted, contemplated construction of a bridge, permanent through 2060, over the Pea Island Inlet and associated hot spots on Pea Island, and, instead, enter a contract to construct an interim bridge for the Phase IIa area. (Id. ¶ 1.a). The 2015 settlement agreement required that any interim solution for Phase IIa be designed to leave open possibility that NC-12 eventually will be moved outside the Refuge completely, with relevant sections relocated to a bridge in Pamlico Sound. (Id. ¶ 3.a).

Second, the 2015 settlement agreement provided that NCDOT must identify the jug-handle bridge “as its preferred alternative and seek Merger Team Concurrence” (Id. ¶ 1.c). The agreement provided also that “[n]othing in this Agreement requires or should be interpreted to

predetermine the choice of the Phase IIb [jug-handle bridge] as the Selected Alternative.” (Id.). The 2015 settlement agreement further required that NCDENR, Division of Coastal Management “provide a written statement of its support and preference” and “otherwise . . . use best efforts to help NCDOT attempt to secure Merger Team concurrence.” (Id. ¶ 1.e). In the event that the Merger Team reached concurrence and concluded that the jug-handle bridge is the Least Environmentally Damaging Practicable Alternative (“LEDPA”), the 2015 settlement agreement required defendants FHWA and NCDOT to “promptly revise” the 2013 Phase IIb EA and Section 4(f) Evaluation to identify the Bridge on New Location as the preferred alternative, and to “[p]ropose to identify the Phase IIb . . . Alternative as the ‘least overall harm’ alternative[.]” (Id. ¶ 3.c.i).

On June 17, 2015, the Merger Team identified the 2014B Bridge on New Location as the LEDPA. RD 16982. On May 24, 2016, FHWA and NCDOT issued the 2016 Revised Phase IIb EA, which document provided updates regarding any changed environmental circumstances occurring since issuance of the 2013 Phase IIb EA. RD 28978. The 2016 Revised Phase IIb EA addressed the same alternatives as the 2013 Phase IIb EA, and included also discussion of the two additional alignments for the Bridge on New Location alternative introduced following the 2013 Phase IIb EA comment period. RD 28983–86. On December 15, 2016, FHWA, with the Merger Team’s concurrence, issued the 2016 Phase IIb ROD approving the Bridge on New Location 2014B alignment as the selected alternative. RD 28979–80. This action followed.

DISCUSSION

A. Standards of Review

1. Summary Judgment

Summary judgment is appropriate where “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). On cross-motions for summary judgment, the court “consider[s] each motion separately on its own merits to determine whether [any] of the parties deserves judgment as a matter of law.” Defs. of Wildlife, 762 F.3d at 392. The party seeking summary judgment “bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact.” Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986).

Once the moving party has met its burden, the non-moving party must then “come forward with specific facts showing that there is a genuine issue for trial.” Matsushita Elec. Indus. Co. Ltd. v. Zenith Radio Corp., 475 U.S. 574, 586–87 (1986) (internal quotation omitted). Only disputes between the parties over facts that might affect the outcome of the case properly preclude entry of summary judgment. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986) (holding that a factual dispute is “material” only if it might affect the outcome of the suit and “genuine” only if there is sufficient evidence for a reasonable jury to return a verdict for the non-moving party).

“[A]t the summary judgment stage the [court’s] function is not [itself] to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial.” Id. at 249. In determining whether there is a genuine issue for trial, “evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in [non-movant’s] favor.” Id. at 255; see

United States v. Diebold, Inc., 369 U.S. 654, 655 (1962) (“On summary judgment the inferences to be drawn from the underlying facts contained in [affidavits, attached exhibits, and depositions] must be viewed in the light most favorable to the party opposing the motion.”).

Nevertheless, “permissible inferences must still be within the range of reasonable probability, . . . and it is the duty of the court to withdraw the case from the [factfinder] when the necessary inference is so tenuous that it rests merely upon speculation and conjecture.” Lovelace v. Sherwin-Williams Co., 681 F.2d 230, 241 (4th Cir. 1982) (quotations omitted). Thus, judgment as a matter of law is warranted where “the verdict in favor of the non-moving party would necessarily be based on speculation and conjecture.” Myrick v. Prime Ins. Syndicate, Inc., 395 F.3d 485, 489 (4th Cir. 2005). By contrast, when “the evidence as a whole is susceptible of more than one reasonable inference, a [triable] issue is created,” and judgment as a matter of law should be denied. Id. at 489-90.

2. APA

“A person . . . adversely affected by agency action within the meaning of a relevant statute[.]” 5 U.S.C. § 702, may bring an action pursuant to the judicial review provisions of the APA, id. § 701, et seq., to challenge “final agency action[.]” Id. § 704. “The reviewing court shall . . . hold unlawful and set aside any agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). The scope of “arbitrary and capricious” review is narrow, but the court must ensure that “the agency examine[s] the relevant data and articulate[s] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); see N.C. Wildlife

Fed’n v. N.C. Dep’t of Transp., 677 F.3d 596, 601 (4th Cir. 2012) (The court “must ensure that the agency has examined the relevant data and articulated a satisfactory explanation for its action, and must not reduce itself to a rubber-stamp of agency action.”) (internal citations and quotation marks omitted).

3. NEPA

NEPA “establishes a national policy to encourage productive and enjoyable harmony between man and his environment, and was intended to reduce or eliminate environmental damage and to promote the understanding of the ecological systems and natural resources important to the United States.” Defs. of Wildlife, 762 F.3d at 393. All major federal actions and federally assisted projects “must comply with both NEPA and the regulations promulgated by the Council on Environmental Quality.” Id. (quoting 40 C.F.R. § 1508.18).

NEPA mandates “a set of ‘action-forcing’ procedures that require that agencies take a ‘hard look’ at environmental consequences, . . . and that provide for broad dissemination of relevant environmental information.” Id. (citation omitted). NEPA “does not mandate particular results[; rather], it prohibits uninformed—rather than unwise—agency action.” Id. (citations omitted).

For every major federal action significantly affecting the quality of the human environment, the agency involved must prepare an Environmental Impact Statement (“EIS”) “that discloses and evaluates, among other things, the environmental impact of the proposed action, unavoidable adverse effects of the proposed action, and alternatives to the proposed action.” Id. at 393–34; 42 U.S.C. § 4332(C). Every EIS must “provide full and fair discussion of significant environmental impacts” arising from the reasonable alternatives. Defs. of Wildlife, 762 F.3d at 394; 40 C.F.R. § 1502.1.

Comparative evaluation of alternatives “is the heart of the environmental impact statement ...” Defs. of Wildlife, 762 F.3d at 394; 40 C.F.R. § 1502.14. Therefore, agencies must “[r]igorously explore and objectively evaluate all reasonable alternatives [.]” Defs. of Wildlife, 762 F.3d at 394; § 1502.14(a). “The assessment of the environmental impacts is the scientific and analytic basis for the comparison of alternatives.” Defs. of Wildlife, 762 F.3d at 394; 40 C.F.R. § 1502.16.

“NEPA does not require agencies to adopt any particular internal decisionmaking structure[,] [b]ut NEPA does require agencies to follow a particular decisionmaking process.” Defs. of Wildlife, 762 F.3d at 394. Any Environmental Assessment (“EA”) or EIS must be completed “before decisions are made and before actions are taken[,]” id.; 40 C.F.R. § 1500.1(b), “to help public officials make decisions that are based on an understanding of environmental consequences.” 40 C.F.R. § 1500.1(c).

4. Section 4(f)

Section 4(f) “imposes substantive restraints on an agency’s action.” Defs. of Wildlife, 762 F.3d at 398. Under Section 4(f), the Secretary of Transportation (“Secretary”) is permitted to approve a transportation project that requires the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge or land of an historic site only if there is no prudent and feasible alternative to using that land; and the program or project includes all possible planning to minimize harm to the publicly owned land resulting from the use.” Id.; 49 U.S.C. § 303(c).

Therefore, Section 4(f) property “may not be put to non-park uses unless there is no feasible and prudent alternative to the non-park use of the land.” Defs. of Wildlife, 762 F.3d at 399. Further, any project that uses Section 4(f) property must “include[] all possible planning to minimize harm to the wildlife and waterfowl refuge.” Id.; 49 U.S.C. § 303(c)(2). “The Secretary must perform a

Section 4(f) evaluation and comply with that provision's other substantive requirements before approving any use of Section 4(f) property.” Defs. of Wildlife, 762 F.3d at 399.

5. Section 106

Congress enacted the National Historic Preservation Act (“NHPA”) to “foster conditions under which our modern society and our historic property can exist in productive harmony.” 54 U.S.C. § 300101(1). Section 106 of the NHPA requires agencies to “take into account the effect of [any proposed Federal or federally assisted] undertaking on any historic property” “prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license.” 54 U.S.C. § 306108. The NHPA defines an “historic property” as “any prehistoric or historic district, site, building, structure, or object included on, or eligible for inclusion on, the National Register . . .” 54 U.S.C. § 300308. “Undertaking means a project, activity or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.” 36 C.F.R. § 800.16(y). Together, these rules enable “members of the public interested in the impacts of a federal license on an historic property [] to have a reasonable opportunity to participate” in administrative procedures leading up to issuance of such license. Pye v. United States, 269 F.3d 459, 470 (4th Cir. 2001).

B. Analysis

Plaintiffs assert various challenges to the 2016 Phase IIb ROD consisting of defendants’ failure to consider effects of transporting construction materials to the construction site, failure to give sufficient consideration to environmental effects on the Refuge, failure to consider socio-

economic effects of Phase IIb on the Rodanthe area, and premature elimination of options involving beach nourishment and failure to consider new information regarding the same. Plaintiffs contend also that the 2015 settlement agreement unlawfully predetermined the outcome of the administrative process pertinent to Phase IIb. The court addresses each claim in turn.

1. Haul Road Claims

Plaintiffs contend that defendants failed to consider environmental effects of transporting construction materials to the Phase IIb construction site, in violation of NEPA, Section 4(f), and Section 106.

The 2016 Phase IIb ROD states that “[c]onstruction activity would be primarily confined to the existing or new easement/right-of-way except at the northern end (in the Refuge), where a [0.63 acre] temporary construction easement east of the existing easement would be needed for a temporary traffic maintenance road to take traffic around the bridge approach.” RD 28992. The 2016 Phase IIb ROD discusses “construction impacts” further in section 5.8. RD 29011–12. That section states that construction of the selected alternative will be governed by NCDOT’s Standard Specifications for Roads and Structures and the American Association of State Highway and Transportation Officials’ LRFD Bridge Design Specifications. Id. Section 5.8 mentions that a number of mechanisms that will be used to minimize environmental harm during construction. RD 29012. Finally, section 5.8 notes that construction of the selected alternative will require a 0.63 acre temporary construction easement within the Refuge at the north end of the Phase IIb construction site, which land will be restored after construction is completed. Id. The Phase IIb ROD notes in an appendix that, in order to avoid dredging areas that contain submerged aquatic vegetation,

construction will involve work bridges to transport construction materials in place of barges where submerged aquatic vegetation is present. RD 29025–26.

The foregoing is sufficient to rebut plaintiffs’ suggestion that the Agencies failed entirely to consider the environmental impacts of construction and hauling. However, where the Phase IIb ROD does not undertake to compare environmental impacts due to construction as between alternatives under consideration, and where comparative analysis is the heart of NEPA review, 40 C.F.R. § 1502.14, the court cannot sustain the Phase IIb ROD based upon analysis contained within its four corners. Accordingly, the court turns its address now to the 2013 Phase IIb EA and Revised 2016 Phase IIb EA and materials cited therein, upon which documents decisions set forth in the 2016 Phase IIb ROD rest. RD 28978 (“In making the Phase IIb Selected Alternative decision, NCDOT and FHWA considered the information and analysis presented in the 2013 Phase IIb EA and the 2016 Revised Phase IIb EA . . .”).

As noted in the 2016 Phase IIb ROD, the Revised 2016 Phase IIb EA states that construction activity for the jug-handle bridge “would be primarily confined to the existing or new easement/right-of-way except at the north end (in the Refuge), where a temporary construction easement east of the existing easement would be needed for a temporary traffic maintenance road to take traffic around the bridge approach. This temporary easement would be approximately 0.63 acre in size.” RD 23465. Construction would last three to three and a half years. Id. By comparison, the Revised 2016 Phase IIb EA states that construction of the easement bridge similarly “would be primarily confined to the existing NC 12 easement, including a temporary traffic maintenance road. However, approximately 2.06 acres of temporary construction easement would be needed to construct Phase IIb in the Refuge.” RD 23468. This construction easement, designed

to provide room for construction workers to erect erosion control measures, would run along the entire length of NC-12 in the refuge on the sound side. Construction for the easement bridge alternative would last between two and three years. Id.

Next, the 2016 Revised Phase IIb EA “updates the impact discussion presented in Chapter 4 of the 2008 FEIS and Section 2.3.3 of the 2010 EA” focusing on “updates relevant to Phase IIb of the Bonner Bridge Replacement Project (B-2500).” RD 23484. The 2016 Revised Phase IIb EA opens its analysis by distinguishing “direct impacts,” consisting of community impacts, visual impacts, cultural resource impacts, parks and recreation impacts, natural systems impacts, noise impacts, and air quality impacts, from “indirect and cumulative impacts,” which relate to anticipated effects on land development, potential loss of natural features, and other cumulative effects upon the project as whole. RD 23484–85; see also 40 C.F.R. §§ 1502.8, 1502.16. The 2016 Revised Phase IIb EA finds that the latter categories of effects are unchanged relative to the effects predicted in the 2008 FEIS for the Road North/Bridge South and Phased Approach/Rodanthe Bridge alternatives. RD 23484. Any changes in direct effects “include all impact associated with the construction, operation, and maintenance of the Phase IIb project.” Id.

Following the foregoing preliminary observations, the 2016 Revised Phase IIb EA discusses updated direct impacts associated with construction, operation, and maintenance of the Phase IIb project for each category of direct impact in turn, and, within discussion of each category, the 2016 Revised Phase IIb notes differences, if any, arising from the selected alternative relative to the easement bridge alternative. See RD 23484–528. The section on construction noise impacts discusses hauling, noting that environmental effects related to noise would be greater should the Agencies build the easement bridge alternative, as that alternative requires a greater amount of

construction in the downtown Rodanthe area where more humans are likely to pass in earshot of the project. RD 23523. That section notes also that noise impacts may be mitigated by selection of haul road locations. Id. The 2016 Revised Phase IIb EA does not discuss hauling in connection with any of the other “direct impacts.” Discussion of hauling in the 2013 Phase IIb EA is virtually identical to discussion contained in the 2016 Revised Phase IIb EA, except insofar as the latter accounts for possible alignments for the jug-handle bridge developed after 2013. Compare RD 23522–23, with RD 11625–26

The 2016 Revised Phase IIb EA hinges its assessment on analysis contained in the 2008 FEIS with assessment that the jug-handle bridge and the easement bridge alternatives “would be similar to what was defined in the 2008 FEIS as the Bridge South component of the Road North/Bridge South and as the Phased Approach/Rodanthe Bridge alternatives, respectively.” RD 23484. Plaintiffs disagree with the Agencies’ conclusion that the jug-handle bridge and easement bridge are similar to their counterparts in the 2008 FEIS; however, based upon diagrams of proposed paths and accompanying analysis of the differences between counterpart alternatives, the Agencies’ assessments that alternatives presented in the 2016 Revised Phase IIb EA are similar in relevant respects to alternatives considered in the 2008 FEIS cannot be deemed arbitrary.³ See RD 23455 (diagram of jug-handle bride with Bridge South); RD 23456 (describing development of easement bridge as refinement of Phased Approach/Rodanthe Bridge alternative); RD 23485–86 (similarly

³ Plaintiffs emphasize in reply that some of the post-2010 NEPA documents cite to analysis of Bridge South set forth in the 2010 EA. On this basis, plaintiffs conclude that analysis of the jug-handle bridge does not link to any bridge studied in the 2008 FEIS and that the jug-handle bridge was never considered in an EIS, as NEPA requires. However, this argument fails where the text of the 2010 EA links alternatives studies therein to alternatives studied in the 2008 FEIS. AR 83408–08 (“Several modifications were made to the detailed study alternatives . . . since the release of the [2008] FEIS . . . These changes are: . . . [m]odifications to the conceptual designs . . . for the Road North/Bridge South [and other] alternatives.”).

of cumulative effects on habitat loss); RD 23488 (reduced takings required relative to those identified in the 2010 EA); RD 23499 (similar use of Refuge land use); RD 23499–503 (similar effects on recreational uses); RD 23508 (similar effects on biotic communities); RD 23518–20 (similar noise impacts). Accordingly, the court now turns its address to any comparative analysis of the Road North/Bridge South and Phased Approach/Rodanthe Bridge alternatives considered in the 2008 FEIS as an additional source of analysis pertinent to the 2016 Phase IIb ROD.

Section 2.10.1.3 of the 2008 FEIS discusses “Construction” of the Oregon Inlet bridge and includes discussion of construction methods. That section states, “[u]nless specified, the construction techniques of the Oregon Inlet bridge would apply to all five NC 12 Maintenance Alternatives.” AR 58455. The five NC-12 Maintenance Alternatives include the Road North/Bridge South and Phased Approach/Rodanthe Bridge alternatives described above. Id. (“The following sections describe the construction techniques for the Oregon Inlet bridge and NC 12 Maintenance alternatives assumed in the assessments of impacts in Chapter 4.”); AR 58350–01 (noting that Road North/Bridge South and Phased Approach/Rodanthe Bridge alternatives selected for detailed analysis). Section 2.10.1.3 includes discussion of “Manufacture and Transport of Components” as follows:

Construction of an Oregon Inlet bridge in the Parallel Bridge Corridor would involve primarily the assembly of large precast concrete units. Precast units, weighing up to 100 tons (90.7 metric tons), would be manufactured at a precast plant and shipped to the construction site. . . . Materials for the footings would be delivered by truck and/or barge. North Carolina highway regulations include a maximum allowable shipping length; parts exceeding this length would be shipped by barge. The least cost method for shipping all parts probably would be by barge.

AR 58455. Additionally, section 2.10.1.3 discusses the nature of a haul road that would run along the west side of the Oregon Inlet bridge, describing in detail its dimensions and method of

construction. See id. Where it does not indicate otherwise, the text of the administrative record discloses that this method of haul road construction, which plaintiffs tout as constituting “extensive analysis of the construction-period impacts of the Bonner Bridge replacement under Phase I” (Pls’ Br. DE 96 at 31), applies also to the jug-handle bridge. AR 58455.

Based upon the foregoing, the Agencies’ considered environmental effects of construction and transportation of construction materials. The record as summarized above supports conclusion that the Agencies comparatively evaluated effect of construction based upon assessment that methods of construction would be the same regardless of which alternative was chosen. Id. In addition, analysis from the 2008 FEIS as updated in the 2016 Revised Phase IIb EA discloses that the easement bridge could be built more quickly, but would require a larger construction easement and cause more construction noise, while the Road North/Bridge South alternative would require more time but a smaller construction easement through Refuge land and would cause less construction noise. Compare RD 23465, with RD 23468; RD 23523.

The 2016 Phase IIb ROD does not expressly compare environmental effects of alternatives in terms of effects attributable to hauling construction materials. However, NEPA does not require the Agencies to embark on a detailed analysis of a possible point of comparison where there is no basis to conclude that alternatives under consideration differ with respect to any environmental tradeoffs due to that point of comparison. 40 C.F.R. § 1502.2(b) (“Impacts shall be discussed in proportion to their significance.”). Therefore, in light of observation in the 2008 FEIS that construction methods would be the same for all alternatives, NEPA does not require a separate comparative analysis with respect to hauling, where hauling constitutes an aspect of other environmental effects that were considered. See id.

This analysis is bolstered by observation that NEPA’s text nowhere identifies “hauling” as a category of analysis that agencies must consider separately from other environmental impact analysis. Rather, the only legal basis for plaintiffs’ challenge to defendants’ consideration of hauling impacts is the general principle of administrative law that agency action must not be arbitrary and capricious. As part of the APA’s injunction against arbitrary administrative action, courts must not uphold a decision that “fails entirely to consider an important aspect of the problem.” Defs. of Wildlife, 762 F.3d at 396. The administrative record discloses affirmatively that the Agencies considered construction methods, noted that construction methods for any alternative under consideration would be the same, and chose to focus the majority of analysis at the conceptual level of “construction” generally, rather than at a more specific level of “hauling.” See AR 58455. Put differently, plaintiffs would have the court second guess the Agencies’ policy determination that “construction impacts” is the relevant unit of analysis and substitute component categories of construction, such as hauling, in its place. However, NEPA leaves to agencies discretion to determine its methodology for measuring environmental harm, as long as that determination is reasonable. Hughes River Watershed Consedrvancy v. Johnson (Hughes II), 165 F.3d 283, 289 (4th Cir. 1999). Accordingly, decision to consider “construction” as the relevant unit of analysis cannot be deemed arbitrary where, in light of the agencies’ determination that construction methods would be the same for any alternative, the administrative record does not compel any conclusion that hauling, as a category distinct from construction more generally, was in itself, “an important aspect of the problem” that required a separate analysis from the more general category of “construction” to which it belongs. See id.

Plaintiffs argue that two construction diagrams included in the administrative record demonstrate that Phase IIb involves construction of haul roads through the Rodanthe Historic District and adjacent wetlands. RD 26, 27. The 2016 Phase IIb ROD makes no reference to these diagrams; therefore, the Agencies were not required to analyze the diagrams as if they embodied the Agencies' construction plans. See 42 U.S.C. § 4332(C) (EIS must analyze "the environmental impact of the proposed action" and alternatives") (emphasis added). Moreover, by letter dated February 8, 2018, counsel for federal defendants gave notice that Flatiron Construction Corporation, contractor for defendant NCDOT, will not use the method of hauling depicted in those diagrams because shallow water depths make that option impracticable. (DE 120-1). Therefore, any challenge based upon those particular diagrams now is moot. DeFunis v. Odegaard, 416 U.S. 312, 316 (1974) ("[F]ederal courts are without power to decide questions that cannot affect the rights of litigants in the case before them.").

Plaintiffs argue further that, even if particular diagrams in the administrative record do not represent the agencies' plans for hauling construction materials, the agencies failed to consider the environmental impacts of hauling, whatever the hauling plan might be. However, this argument fails where, as noted above, the Agencies did consider hauling as part of analysis of construction methods. AR 58455. To be sure, the administrative record does not disclose the precise location of haul routes; however, it notes that all construction will remain within the existing NC-12 easement except where a temporary construction easement is required in north, RD 28992, that haul roads will not cross submerged aquatic vegetation, RD 23422, and that land used for haul roads will be restored after construction is complete. RD 29012.

Where the Fourth Circuit has held previously that challenges based upon missing information must not infringe upon agencies' discretion to determine what information is important to include in NEPA documents, including the "location and distance of access roads" to a construction site, the court will not second guess the Agencies' decision to omit the same information here. Webster v. U.S. Dept. of Agriculture, 684 F.3d 411, 425–26 (4th Cir. 2011). That is, where the Agencies indeed disclosed that haul roads may be a part of the Phase IIb project, noted constraints on the location of haul roads the Agencies deemed important, and described in detail the nature of any haul roads that might be built, the Agencies satisfied their duty to give such consideration to hauling as is warranted under the circumstances. See 40 C.F.R. 1502.2(b) ("Impacts shall be discussed in proportion to their significance."). The foregoing analysis cannot be deemed arbitrary; therefore, plaintiffs' arguments on this basis fail. 5 U.S.C. § 706(2)(A).

2. Pea Island Wildlife Refuge Claims

Plaintiffs next contend that the Agencies failed to analyze environmental effects of the Phase IIb alternatives on the Refuge "as a refuge."

Sections 5.4.1.1 through 5.4.1.3 of the 2016 Revised Phase IIb EA set forth a number of administrative findings regarding environmental effects of the Phase IIb alternatives on the Refuge. RD 17902–05. Section 5.4.1.1 compares environmental effects on the Refuge in terms of "permanent incorporation of land" finding that while the easement bridge alternative "would be confined to the existing NC 12 easement" with no resulting permanent incorporation of land, the jug-handle bridge alternative would permanently incorporate 2.79 acres of Refuge land to accommodate that portion of the jug-handle bridge in the Northern end of the Refuge that turns

toward Pamlico Sound to connect existing NC-12 with the new bridge over Pamlico Sound. RD 17902.

Section 5.4.1.2 discusses “temporary occupancy” in reference to Refuge land that will be used during the construction process to facilitate construction. RD 17902–04. The 2016 Revised Phase IIb EA concludes that, subject to agreement by officials with jurisdiction over management of the Refuge, namely, United States Fish and Wildlife Service and the North Carolina State Historic Preservation Officer, any temporary occupancies involved in either Phase IIb alternative would not constitute a Section 4(f) use, and plaintiffs present to the court no challenge to this conclusion. See 23 C.F.R. 774.13(d); RD 17902–04. Nonetheless, section 5.4.1.2 observes that while the easement bridge alternative would require a temporary construction easement 2.06 acres in area, the jug-handle bridge alternative would require a smaller 0.63 acre temporary construction easement. RD 17902.

Section 5.4.1.3 of the 2016 Revised Phase IIb EA discusses constructive uses of the Refuge that would result from construction of the easement alternative. RD 17904–05. That section observes also that where the jug-handle bridge alternative would permanently incorporate Refuge lands, there is no need to analyze that alternative as presenting a constructive use. 23 C.F.R. § 774.15(a) (“A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property . . .”).

Section 5.6 of the 2016 Revised Phase IIb EA embodies the agencies’ “Least Harm Analysis” wherein the Agencies conclude that the jug-handle bridge would cause the least overall harm to the Refuge. RD 17914–15. The Least Harm Analysis notes that both alternatives meet the needs of the project, RD 17911, use the same Section 4(f) property, id., and that the Refuge Manager

expressed no preference for either alternative. Id. The Least Harm Analysis concludes that while both bridges would cause the same type of visual impacts, namely, presence of an artificial structure in contrast with the natural character of the Refuge, visual impacts of jug-handle bridge alternative extend only 0.4 miles, while visual impacts of the easement bridge would extend for 1.8 miles. RD 17910.

Finally, and arguably the most salient feature of the Least Harm Analysis, the Agencies conclude that while the jug-handle bridge alternative would incorporate permanently 2.79 acres of Refuge land, it would also return and restore 19.27 acres of Refuge land by removing the existing road that now traverses the Refuge, resulting in a net gain of 16.48 acres of restored Refuge land. Id. No net gain of Refuge land would result from constructing the easement bridge alternative. Id. In this manner, the only factor in the Least Harm Analysis that both pertains to environmental effects on the Refuge “as a refuge” and differs as between the two alternatives is the net gain of Refuge land associated with the jug-handle bridge. Selecting an alternative because it involves reduced visual effects and also returns and restores protected property is an entirely reasonable application of Section 4(f) in this instance, where that choice minimizes harm to the Refuge. 49 U.S.C. § 303(c). Such decision does not, as plaintiffs contend, represent a failure to consider environmental effects on the Refuge “as a refuge.” See id.

Plaintiffs argue that where the 2016 Revised Phase IIb EA notes that, if the jug-handle bridge is built, “[p]ermanent loss of wildlife habitat in the Refuge would be 0.01 acre of pile impact (0.30 acre if assuming the larger pile cap area)[,]” RD 11639, that this analysis is deficient because while it analyzes effects on the Refuge in terms of land area consumed, it fails to assess directly the effects of such loss of land on the wildlife that the Refuge is intended to protect. However, NEPA permits

the Agencies discretion to make policy choices regarding the kinds of information to be viewed as environmentally significant. Hughes II, 165 F.3d at 289. Here, NEPA does not prohibit the Agencies from measuring environmental costs and benefits to the Refuge in units of land area consumed or returned by alternatives under consideration. See id. Therefore, the court will not require the Agencies to envision every conceivable metric to measure environmental effects germane to Refuge purposes and demand separate measurements on each metric. Indeed, this approach is precluded by Council on Environmental Quality (“CEQ”) regulations stating that environmental impact analysis should not be “encyclopedic,” 40 C.F.R. § 1502.2(a); rather, the agencies must focus their analysis on truly significant aspects of the problem at hand to avoid muddying the waters with consideration of minor factors that would invite flyspecking. Webster, 685 F.3d at 426. In the spirit of this standard of review, the Agencies’ policy decision to select net land area returned as the measure of environmental effects on the Refuge cannot be deemed arbitrary. See 5 U.S.C. § 706(2)(A). Accordingly, plaintiffs’ challenge on this basis fails.

3. Rodanthe Socio-Economic Effects Claims

Plaintiffs contend that defendants failed to consider socio-economic effects of the alternatives under consideration on the community of Rodanthe as a distinct unit, including effects upon property values, rental income streams, and kiteboarding tourism in the Rodanthe community.

Under CEQ regulations, “[w]hen an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.” 40 C.F.R. 1508.14. The Phase IIb ROD discusses impacts on “Recreational Use” with reference to analysis set forth in the 2008 FEIS. RD 28997. The 2016 Phase IIb ROD states “[l]ike the 2010

Bridge South . . . the Selected Alternative would create an offshore obstruction for recreational users of the Pamlico Sound, such as wind surfers, kayakers, and kite boarders as the bridge moves out from shore in Rodanthe.” Id. The 2016 Phase IIb ROD notes also that “[t]he shoreline is lined with vacation rental cottages that often rent to persons who conduct water sports in the sound.” RD 28998.

Similarly, the 2008 FEIS states that, for recreational users of Pamlico Sound, including “wind surfers, kayakers, and kite boarders,” AR 57549, the Road North/Bridge South alternative, which, as noted, parallels the jug-handle bridge alternative, “would place an obstruction in the Sound as the Rodanthe area bridge moves out from shore in the Refuge to a point about 1,500 feet (480 meters) west of Hatteras Island Because of this bridge’s close proximity to the shore, the impacts to recreational users would be more substantial. The Nourishment and the two Phased Approach alternatives would not affect the use of Pamlico Sound.” AR 57550. In addition, the 2008 FEIS notes that, despite negative effects that the jug-handle bridge may have upon the activities of recreational users, “[n]umerous additional opportunities exist for these activities . . .” Id.

The 2016 Revised IIb EA echos and updates findings in the 2008 FEIS, noting that the selected jug-handle bridge would lie approximately 1,050 to 1400 feet from the island, leaving 356 acres of open water between bridge and shore. RD 23549. In response to comments to the 2016 Revised Phase IIb EA, the Agencies considered effects on kiteboarding and noted that “[w]ith the [s]elected [a]lternative the primary watersport recreational impact is expected to be kiteboarding.” RD 29160. In this manner, it cannot be said that the Agencies failed to consider environmental effects on the Phase IIb project pertaining to recreational activities, including kiteboarding.

With respect to economic factors, Section 4.2.1 of the Revised Section 4(f) evaluation discusses “community impacts associated with the Phase IIb detailed study alternatives since the 2008 FEIS, as updated in the 2010 EA.” RD 24153. That section notes the number of homes and businesses that would require relocation for both alternatives under consideration, concluding that the easement bridge would require relocating six homes and seven businesses, while the jug-handle bridge would require relocating two homes and five businesses. RD 21453. With respect to the Rodanthe area in particular, the studies determine that there would be minimal economic impact from displacement, with exception of possible relocation of the Liberty Service Station/Island Convenience Store, which relocation would be necessary only if the easement bridge alternative were selected. RD 24154.

The 2008 FEIS assesses economic impacts of the B-2500 project in Section 4.1.5, including economic effects of Parallel Bridge Corridor alternatives selected for detailed study, of which group both the Road North/Bridge South and Phased Approach/Rodanthe Bridge alternatives are members. AR 57511–22. Assessment of economic effects in section 4.1.5 embraces “displacement of businesses, lost tax base for Dare County associated with the land for the project right-of-way in Rodanthe, . . . and the risk of a new breach opening within the Refuge, as well as the economic impact of such a breach.” AR 57511. That section notes that the Phased Approach/Rodanthe Bridge would displace the Liberty service station, while the Road North/Bridge South alternative would displace no businesses. AR 57512. Regarding the Dare County tax base, section 4.1.5 concludes that “[w]ith the exception of the Parallel Bridge Corridor with Nourishment Alternative, the tax base of Dare County would be reduced by all of the replacement bridge corridor alternatives, because the land and building purchased for the project right-of-way in Rodanthe would be removed from the

county tax base.” AR 57512. The analysis notes also that any tax revenue lost would be only a small percentage of the overall tax base for Dare County, and the analysis proceeds to provide quantitative estimates of lost tax revenue for the various options. Id.

Finally, section 4.1.5.3 analyzes “effect of changed access” which section addresses economic effects attributable to loss of paved road access to certain areas within Dare County caused by various alternatives. AR 57513–17. The analysis notes “[t]he Parallel Bridge Corridor would retain paved road access in the Refuge, although that access would be limited to three locations with the All Bridge Alternative and two locations with the two Phased Approach alternatives . . .” AR 57513. In addition, the assessment discusses economic effects on Dare County of eliminating paved road access north of Rodanthe, finding that “[o]n average, these losses are not likely to have a major economic impact on the Outer Banks/Dare County area.” Id. While certain discreet businesses “could suffer serious losses,” surveys described in section 3.5.2.4 of the 2008 FEIS addressing “Visitors and Their Activities” indicate that, to any extent modes of access to the Refuge might change, most individual who use the Refuge will either continue to do so without paved Refuge access or could conduct their activities elsewhere in the outer banks. See AR 57435.

The foregoing analyses of effects on recreation and economic effects in the Dare County area attributable to the B-2500 project constitute discharge of the Agencies’ duty under 40 C.F.R. § 1508.14, to consider economic and social effects. Plaintiffs’ assertions to the contrary rest on argument that the Agencies were required to analyze these effects at a higher level of geographic resolution, separating analysis pertinent to the Rodanthe community from other sub-units of Dare County or the Outer Banks. However, from the principle that NEPA leaves to agencies discretion to determine methodology for measuring environmental harm, Hughes II, 165 F.3d at 289, the

Agencies have discretion to make policy judgments as to the proper geographic unit of analysis for economic and social effects. See id.

Moreover, as noted in the 2008 FEIS, there are six other communities in the area south of the Refuge, and the Agencies did not act arbitrarily in considering their interests together, or in assessing that changed access to a certain recreational or economic activity would result in an economic “loss” only if the activity were otherwise unavailable in Dare County. See RD 23613 (“The economic study team concluded that a loss of tourism dollars would occur if a road that provides direct access to a recreational resource was eliminated, and this resource was unique (not available anywhere else in Dare County.)”); RD 23500 (“As indicated in the 2008 FEIS study, the key question in terms of the economic impact to the Outer Banks economy is what resource/activity is lost, or to which access is reduced or lost, and whether there is no other location on the Outer Banks to participate in the activity.”)). Where policy decisions, including decision as to the geographic scope of a relevant economic “area,” are within the Agencies discretion to determine methodology to measure environmental harm, plaintiffs’ challenge to the Agencies’ decision to measure economic effects at the county level fails. See Hughes II, 165 F.3d at 289.

4. Beach Nourishment/New Information Claims

Plaintiffs contend that defendants violated NEPA by failing to reevaluate beach nourishment as an alternative in light of new information obtained following an emergency beach nourishment project undertaken in 2014 to mitigate harm caused by Hurricane Sandy. See RD 23478.

When new information arises after preparation of an EIS, agencies may be required to produce a supplemental EIS to explore that information and incorporate it into the decision-making process. See Marsh v. Oregon Nat. Res. Council, 490 U.S. 360, 371 (1989) (“It would be

incongruous with [NEPA's] approach to environmental protection, and with [NEPA's] manifest concern with preventing uninformed action, for the blinders to adverse environmental effects, once unequivocally removed, to be restored prior to the completion of agency action simply because the relevant proposal has received initial approval.”). In particular, agencies must “prepare supplements to either draft or final EIS’s if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” Id. at 372 (citing 40 C.F.R. 1502.9(c)).

FHWA regulations provide additional guidelines for NEPA compliance in actions under FHWA jurisdiction. 23 C.F.R. § 771.109(a)(1). The regulations provide “[a] draft EIS, final EIS, or supplemental EIS may be supplemented at any time. An EIS shall be supplemented whenever the [FHWA] determines that: . . . (2) [n]ew information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS.” Id. § 771.130(a). To determine whether a supplemental EIS is necessary “[a]n [Environmental Assessment] shall be prepared by the applicant in consultation with the [FHWA] for each action that . . . does not clearly require the preparation of an EIS, or where the [FHWA] believes an EA would assist in determining the need for an EIS.” Id. § 771.119(a).

The Agencies eliminated Phase IIb alternatives involving beach nourishment at a meeting held November 14, 2012. RD 17834. As part of the 2016 Phase IIb ROD, the Agencies responded to comments to the 2016 Revised Phase IIb EA submitted in support of beach nourishment. RD 29113–29212. The Agencies offered seven reasons for decision to reject commenters’ suggestions that beach nourishment warranted reconsideration, consisting of: (1) nourishment would not adequately protect NC-12 from potential future breaches/inlets; (2) regular nourishment would not

ensure that a severe storm would not break down a part of the dune causing overwash to cover NC-12 with sand or damage it; (3) nourishment would not allow natural island processes to occur in the Refuge; (4) a long-term nourishment plan is not likely to be found compatible with Refuge's mission; (5) high erosion may require importation of more sand than is available; (6) emergency nourishment accomplished in 2014 was premised upon nourishment as a temporary solution to an isolated problem, and, thus, analysis pertinent to that project is irrelevant to reasonableness of nourishment as a long term solution; and (7) nourishment is too costly. RD 29205– 08.

Plaintiffs advance specific challenge to two of the foregoing rationales for rejecting beach nourishment alternatives. First, plaintiffs dispute the Agencies' conclusion that insufficient sand is available to meet the needs of nourishment alternatives on grounds that the emergency beach nourishment project in 2014 revealed a previously unknown source of sand and that updated erosion projections demonstrate that less sand is needed to accomplish beach nourishment through 2060 than originally thought. Second, plaintiffs contend that, when estimating costs of beach nourishment, the Agencies' failure to discount future costs to present value was arbitrary.

Plaintiffs' challenges fail from the outset because they do not embrace all the reasons that the Agencies' deemed beach nourishment inadequate to meet the needs of the B-2500 project. That is, where one of the stated purposes of the B-2500 project is to provide a transportation solution that minimizes NC-12 closures and associated losses due to shoreline erosion, overwash, and breaches and inlets, RD 28976, where nourishment options leave NC-12 subject to breaching and overwash resulting in road closures, RD 29140, the Agencies did not act arbitrarily in holding nourishment options inadequate relative to the goals of the B-2500 project. See Motor Vehicle Mfrs., 463 U.S.

at 43 (Agency action must be upheld under 5 U.S.C. § 706(2)(A) where the agency demonstrates a rational connection between the facts found and choice made.).

As a separate and independent basis, the Agencies eliminated beach nourishment options on the ground that where they interfere with natural erosion in the Pea Island, such options are unlikely to be consistent with the purposes of the Refuge. RD 28628. Each of the foregoing considerations is supported by substantial evidence in the record and constitutes sufficient reason to conclude that beach nourishment is not an adequate solution in light of the goals of the B-2500 project. See 5 U.S.C. § 706(2)(A). In this manner, the Agencies' continuing decision to exclude from consideration options involving beach nourishment and to reject calls to supplement NEPA documentation cannot be deemed arbitrary. See id. For the same reasons, information suggesting availability of additional sand, reduced erosion, and resultant reduced cost of nourishment does not constitute "significant new circumstances or information" triggering requirement of a supplemental EIS, because even if new information demonstrates that sufficient sand is available at reasonable cost to facilitate nourishment, that information is not "significant" for NEPA purposes where there exist, on these facts, independent considerations, namely inadequate protection against breaches and overwash and likely inconsistency with Refuge purposes, that render nourishment an unsuitable candidate for selection. Marsh, 490 U.S. at 372; 40 C.F.R. § 1502.9(c)(ii).

Plaintiffs advance a number of arguments that factors other than sand suitability, shoreline-erosion projections, and cost do not provide sufficient independent support to the Agencies' decision to eliminate beach nourishment. First, plaintiffs argue that minutes for a December 15, 2011 meeting where beach nourishment was discussed indicate that uncertainties regarding sand sources and shoreline-erosion projections were the main reasons for eliminating nourishment options. (RD

2888). However, this argument is inapposite where the 2016 Phase IIb ROD is the document that embodies the Agencies' decision, and, as such, it is the reasoning set forth in that document that is subject to review under § 704 of the APA (judicial review available for "final agency action"). Where, as described above, the 2016 Phase IIb ROD identifies independently sufficient reasons for elimination of beach nourishment other than uncertainties regarding sand suitability and erosion projections, plaintiffs' contrary argument fails.

Second, plaintiffs argue that changes in shoreline erosion projections undermine the Agencies' conclusion that the easement bridge and jug-handle bridge alternatives protect NC-12 from breaches while nourishment options do not. Specifically, plaintiffs argue that "[g]iven that the projected rate of erosion has been significantly reduced, RD 23478; RD 11576; RD 23459, it stands to reason that the S Curves vulnerability to breaches and inlets has been reduced." (DE 120 at 40–41). Although plaintiffs provide support in the administrative record for the proposition that updated shoreline erosion projections predict less erosion, plaintiffs' provide no support for any inference that susceptibility to breaching is a function of erosion rates. Indeed, the Agencies note expressly that storms, not gradual erosion, often cause breaches. RD 29140. Therefore, plaintiffs' arguments that breaches might be less likely under updated erosion projections do not find support in the administrative record. Thus, the Agencies did not act arbitrarily in reaching conclusion that a bridge over or around areas subject to breaching meets the needs of the B-2500 project while nourishment options do not. See 5 U.S.C. § 706(2)(A).

Third, plaintiffs object to the Agencies' conclusion that nourishment would not allow natural island processes to occur and, thus, likely is incompatible with the Refuge's purposes. Specifically, plaintiffs argue that the Agencies' apparent preference to promote "natural processes" fails to

distinguish any alternative where any artificial bridge or road requires an unnatural use of land. However, this argument fails where the record discloses that the Agencies' reference to "natural processes," in this context, means "natural erosion" and related processes, which beach nourishment would bring to halt. See AR 58726–27 (discussing environmental benefits of allowing natural processes to occur in 2208 FEIS); RD 29140. Plaintiffs are correct that any artificial structure may be characterized as an "unnatural" use of land under a broad definition of that term. However, there is a distinction of workable clarity between building a bridge that allows geological processes to unfold around it and actively importing large quantities of sand to stop all erosion, such that the latter meaningfully may be deemed prohibitive of natural processes where the former need not be so deemed. Accordingly, the Agencies' decision to apply this distinction and eliminate beach nourishment options in an effort to allow natural processes to occur was not arbitrary. See 5 U.S.C. § 706(2)(A).

Relatedly, plaintiffs argue that where the Agencies' decision to eliminate beach nourishment rests on assessment that nourishment options are "likely" to be found inconsistent with the purposes of the Refuge, the Agencies failed to take the required "hard look" at nourishment options. In context, however, the Agencies assessment that beach nourishment options are "likely" to be found inconsistent with the Refuge's purposes simply constitutes acknowledgment that any construction in the Refuge requires a permit from USFWS, and, as part of that permitting process USFWS must make a determination that the B-2500 project would "fulfill . . . the specific purposes for which [the Refuge] was established." 16 U.S.C. § 668dd. Where the administrative record indicates that beach nourishment can reduce available natural habitat for migratory birds and other wildlife for which the Refuge was established, see AR 58727; see also EO 7864, 3 FR 863 (Apr. 12, 1938) (defining

Refuge purposes), it is indeed likely that long-term beach nourishment is inconsistent with the purposes of the Refuge.

Although NEPA requires the Agencies to assess all reasonable alternatives, NEPA does not require the Agencies to apply for a permit in spite of reasonable belief that such permit is likely to be denied nor include detailed analysis for a likely unsuccessful alternative in an EIS. See 40 C.F.R. 1502.2(b) (“[T]here should be only enough discussion to show why more study is not warranted.”). Where the Agencies’ conclusion that said permit was likely to be denied rests upon observation that beach nourishment options would prevent natural erosion processes from occurring, possibly harming habitat of protected wildlife, the Agencies decision to abandon beach nourishment was not arbitrary. 5 U.S.C. § 706(2)(A).

Fourth, plaintiffs argue that no case law holds specifically that all factors underlying an agency’s decision must materially change in order to warrant a supplemental EIS. Nonetheless, as is plain in its text, 40 C.F.R. §1502.9(c)(1)(ii) requires a supplemental EIS only upon discovery of “significant new circumstances or information.” A consideration cannot be deemed “significant” unless it might cause a reasonable decision-maker to change course. See Hickory Neighborhood Def. League v. Skinner, 893 F.2d 58, 63 (4th Cir. 1990) (“[T]he new circumstance must present a seriously different picture of the environmental impact of a proposed project from what was previously envisioned.”) (emphasis in original); see also New River Valley Greens v. United State Dep’t. of Transp., No. 97-1978, 1998 WL 633959, *4 (4th Cir. Sep. 10, 1998) (“The word ‘significant’ carries the weight of this regulation.”). Therefore, even assuming the Agencies’ erosion projections and cost calculations are outdated, where other considerations render beach nourishment an unsuitable option in light of the goals of the B-2500 project, a new consideration that undermines

only a subset of multiple independent reasons to exclude beach nourishment is not significant for purposes of 40 C.F.R. § 1502.9(c)(1)(ii). See Hickory, 893 F.2d at 63.

Plaintiffs' remaining arguments address the Agencies' analysis of changed erosion projections, which, as noted, the court does not view as material in light of presence of independent bases to reject beach nourishment as a reasonable option.

5. Predetermination

Plaintiffs contend that, in addition to any underlying failures to conduct sufficient analysis under pertinent statutory standards, the 2016 Phase IIb ROD is void because the Agencies' approval of the 2016 Phase IIb ROD unlawfully was predetermined by the 2015 settlement agreement that ended the conservation groups' challenge to the 2010 Phase I ROD.

In determining NEPA compliance, “[a] court should generally restrict its inquiry to the objective adequacy of the EIS, namely, thorough investigation of environmental effects and candid acknowledge of potential environmental harms.” Nat. Audubon Soc., 422 F.3d at 198. “Courts should not conduct far-flung investigations into the subjective intent of an agency[,]” because such inquiries may “restrict the open exchange information within an agency, inhibit frank deliberations, and reduce the incentive to memorialize ideas in written form.” Id. In addition, subjective inquiries “could also frustrate an agency’s ability to change its mind or refocus its actions, the very effect that NEPA was designed to encourage.” Id. Although “NEPA of course prohibits agencies from preparing an EIS simply to justify decisions already made” or committing resources prejudicing selection of alternatives before making a final decision, 40 C.F.R. 1502.2(f), the evidence of such post hoc rationalization “consists of the environmental analysis itself.” Nat. Audubon Soc. v. Dep’t. of Navy, 422 F.3d at 198.

Plaintiffs' claims based upon predetermination fail because, for reasons set forth in previous sections, "the environmental analysis itself" discloses no basis to conclude that the Agencies selected the jug-handle bridge due to predetermination. See id. Rather, consistent with NEPA's "hard look" requirement and "action forcing" purposes, the Agencies undertook extensive evaluation of environmental effects arising from available alternatives and concluded that where the jug-handle bridge would provide reliable road transportation though areas of the Outer Banks subject to breaching and overwash, return a significant section of land to the Refuge, promote natural geologic processes within the Refuge, was feasible in light of existing permitting requirements, all at a cost-effective price, that it was Least Environmentally Damaging Practicable Alternative, and, thus, a non-arbitrary choice for Phase IIb of the B-2500 project. RD 28975–80. In light of these observations, any "far-flung investigation[] into the subjective intent" of the Agencies is unwarranted. See Nat. Audubon Soc., 422 F.3d at 198. Rather, where the record is devoid of any evidence of predetermination made manifest in flawed environmental analysis, the court must take at face value the reasons for selecting the jug-handle bridge set forth in the 2016 Phase IIb ROD. See id.

Plaintiffs argue, under standards borrowed from the Ninth and Tenth Circuits, that predetermination invalidates any administrative decision upon proof of an "irreversible and irretrievable commitment of resources" prior to final administrative decision. Metcalf v. Daley, 214 F.3d 1135 (9th Cir. 2000); Forest Guardians v. United States Fish & Wildlife Serv., 911 F.3d 692 (10th Cir. 2010). Plaintiffs contend the terms of the 2015 settlement agreement and the Agencies' subsequent conduct indicates that the Agencies abandoned their duty to weigh environmental effects

of alternatives under consideration after signing the agreement and, instead, designated the jug-handle bridge as the LEDPA because they were bound by the 2015 settlement agreement to do so.

These arguments fail, first, because, under Fourth Circuit precedent, the evidence of predetermination “consists of the environmental analysis itself[,]” Nat. Audubon Soc., 422 F.3d at 198; Forest Guardians, 611 F.3d at 717 (recognizing disagreement with Fourth Circuit approach to predetermination claims), and, as noted, the administrative record at issue here supports the 2016 Phase IIb ROD; thus, no inference of predetermination is available. Second, key text of the 2015 settlement agreement is conditional in nature, and therefore, contemplates that the Agencies might both comply with the terms of settlement and still reject the jug-handle bridge. In particular, the text of the 2015 settlement agreement states, “[i]f the Phase IIb Bridge on New Location Alternative is determined to be the least environmentally damaging practicable alternative (“LEDPA”) and becomes the Selected Alternative, Plaintiffs covenant not to sue . . . as to any claim based on . . . the NEPA and Section 4(f) documents issued for the Phase IIb Bridge on New Location Alternative, or any permit, approval or any other decision regarding the Phase IIb Bridge on New Location Alternative.” (DE 95-1 at ¶ 2.c (emphasis added)). Accordingly, the 2015 settlement agreement contemplates that if the jug-handle bridge is not designated as the LEDPA, the conservation groups reserve their rights to challenge the Phase IIb decision. See id.

Third, the facts of National Audubon Society indicate that it is a physical commitment of resources that implicates predetermination concerns. In that case, the Fourth Circuit expressed approval of preliminary activities during preparation of an EIS because none of the activities “include[d] cutting even a single blade of grass in preparation for construction” of the project. 422 F.3d at 206. Similarly, where, as here, agencies engage in mere planning and preparation in absence

of groundbreaking activities, no irreparable and irretrievable commitment of resources has occurred. See id.

Fourth, plaintiffs contend that the structure of Merger Team decision-making procedures demonstrates that the court should view the Agencies' unanimous concurrence that the jug-handle bridge is the LEDPA as a consequence of predetermination. Specifically, plaintiffs note that the Merger Team agreement provides that where the Agencies are unable to reach concurrence on a given point, the matter is decided by majority vote of a subset of the Agencies, consisting of defendant NCDOT, defendant FHWA, NCDENR, and USACE. RD 18093. Plaintiffs contend that where three out of four members of this dispute resolution board are parties to the 2015 settlement agreement any vote against the jug-handle bridge would have been futile, thus, unanimous concurrence that the jug-handle bridge was the LEDPA was essentially preordained. However, plaintiffs' conclusion does not follow from the premises. Rather, an equally plausible interpretation of a Merger Team member's incentives is that, where apprised that its vote cannot affect a decision nor otherwise impede the B-2500 project, such agency may as well vote its conscience, perhaps in hopes that its dissent will persuade this court. Accordingly, absence of any dissent to selection of the jug-handle bridge does not, as plaintiffs contend, establish that any decision was predetermined. Plaintiffs' claims on this basis fail.

Finally, this court is not at liberty to approve selection of an alternative that does not comply with NEPA and Section 4(f), see Coal. for Responsible Reg'l. Dev., 518 F.2d at 525 (Section 4(f) property "may not be put to non-park uses unless there is no feasible and prudent alternative to the non-park use of the land."), and no settlement agreement or other contract could supercede the statutory requirement that the Agencies select the true LEDPA. U.S. Const. Art. VI § 2 ([T]he Laws

of the United States . . . shall be the supreme Law of the Land . . .”). Therefore, it is unreasonable to read the 2015 settlement agreement as requiring the Agencies to designate the jug-handle bridge as LEDPA even if subsequent environmental analysis precludes that designation, because such a deal would be unenforceable as preempted by statute. See id. Rather, it is more reasonable to interpret the 2015 settlement agreement as securing assurances from the Agencies that they would pursue in good faith selection of the jug-handle bridge, to the extent the law allows it, by identifying the jug-handle bridge as the preferred alternative and seeking Merger Team concurrence, without prejudice to possibility that the evidence might reveal a different LEDPA. (See DE 91-1 ¶ 1.c). That conduct does not constitute unlawful predetermination.

In sum, plaintiffs’ challenges to the 2016 Phase IIb ROD fail. The Agencies adequately considered impacts of the construction process, effects on the Refuge, and socio-economic effects. Moreover, the Agencies did not eliminate beach nourishment options prematurely, nor was the 2016 Phase IIb ROD unlawfully predetermined.

CONCLUSION

For reasons noted, plaintiffs’ motion for summary judgment, (DE 95), is DENIED, and defendants’ and intervenor-defendants’ motions for summary judgment, (DE 107, 108, 115), are GRANTED. The clerk is DIRECTED to close this case.

SO ORDERED, this the 4th day of June, 2018.


LOUISE W. FLANAGAN
United States District Judge